

REMARKS

Claims 1, 3 through 13, and 15 through 34 are pending in this Application. Claims 1, 3 through 5, 10 through 17, and 22 through 24 have been amended, claims 2 and 14 have been cancelled, and new claims 25 through 34 have been added. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure noting, for example, that the display region specified in independent claims 1 and 13 corresponds to reference numeral 90c shown in, for example, Figs. 3 and 21 of the present Application. Applicants further note that the limitations of claim 2 have been incorporated into claim 1, the limitations of claim 14 have been incorporated into claim 13, and the remaining claims appropriately amended. Further, new claim 25 basically corresponds to new claim 1 and further limits the thickness of the convex insulating film. Claims 26 through 34 basically correspond to previous claims 3, 4, and 6 through 12, respectively, but depend from claim 25. Applicants submit that the present Amendment does not generate any new matter issue.

Claims 1 through 4, 6 through 15 and 18 through 24 were rejected under the second paragraph of 35 U.S.C. § 112.

In the statement of the rejection, the Examiner asserted that the scope of the claims cannot be assessed with respect to the second region or the transmissive region which extends across adjacent pixels. This rejection is traversed.

Independent claims 1 and 13 have been clarified by identifying the display region as consisting of a plurality of pixel regions, corresponding to display region 90c having a plurality of pixels as clearly shown in Figs. 3 and 21 of the present Application. Further, independent

claims 1 and 13 have been clarified by denoting a convex region having a convex insulating film and a concave region in which the convex insulating film is not formed. Clearly, one having ordinary skill in the art would have no difficulty understanding the scope of the claimed inventions, particularly when reasonably interpreted in light of and consistent with the written description of the specification, again noting Figs. 3 and 21 and the related discussion thereof in the written description of the specification. *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993).

Applicants, therefore, submit that the imposed rejection of claims 1 through 4, 6 through 15, and 18 through 24 under the second paragraph of 35 U.S.C. § 112 is not legally viable and, hence, solicit withdrawal thereof.

Claims 1 through 4, 6, 7, 9 through 15, 18, 19, and 21 through 24 were rejected under 35 U.S.C. § 102 for lack of novelty as evidenced by Ozawa et al.

In the statement of the rejection the Examiner again referred to Figs. 4A and 4B, asserting the disclosure of a display corresponding to that claimed comprising, *inter alia*, adjacent pixels in region 32, wherein each pixel display region has a reflective region and a transmissive region, and a second region corresponding to the transmissive region continuously formed among the adjacent pixels. This rejection is traversed as factually inaccurate.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 66 USPQ2d 1801 (Fed. Cir. 2003); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917

(*Fed. Cir.* 2002). When imposing a rejection under 35 U.S.C. § 102, the Examiner is required to specifically identify wherein an applied reference is asserted to identically disclose each and every feature of a claimed invention, particularly when such is not apparent as in the present case. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (*Fed. Cir.* 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (*Fed. Cir.* 1984). That burden has not been discharged. Indeed, there is a fundamental difference between the claimed display and the display disclosed by Ozawa et al. that scotches the factual determination that Ozawa et al. discloses a display identically corresponding to that claimed.

Specifically, it appears that the Examiner has misinterpreted the teachings of Ozawa et al. For example, in the July 11, 2006 Office Action, the Examiner asserted that in Fig. 4A, Ozawa et al. disclose the limitations of claims 2 and 14, which limitations have been incorporated into claims 1 and 13, respectively, i.e., “at least one end of said concave region is disposed outside of said display region.” This determination is not accurate.

Clearly, as one having ordinary skill in the art would have understood from Fig. 4A, Ozawa et al. disclose a region consisting of a pixel only, not “a display region consisting of a plurality of pixels”, wherein at least one end of the concave region is disposed outside of the display region.

In other words, the Examiner’s rejection appears to be predicated upon a determination that the expression “display region” is a region consisting of a pixel. However, in accordance with independent claims 1 and 13, the display region is a screen having a **plurality of pixels**. This **difference** between the claimed inventions and Ozawa et al. is sufficient to undermine the factual determination of lack of novelty under 35 U.S.C. § 102.

Moreover, in accordance with the present invention, the end of the concave region in which the orientation film is likely to stay is not disposed in the display region by virtue of the claim requirement “at least one end of said concave region is disposed outside of said display region”. Therefore, the orientation film positioned in the concave region in the display region can be advantageously formed with uniform thickness. Specifically, in the end of the concave region, the orientation film is not formed along the slant face of the convex insulating film due to surface tension, and stays in the end. However, the end is disposed outside of the display region, whereby the orientation film in the display region is substantially uniformly formed. Thus, the present application advantageously prevents lowering of display quality.

By contrast, Ozawa et al. neither disclose nor suggest the concept of forming the concave region continuous among the adjacent pixels, and preventing the orientation film from staying in the concave region. It is, therefore, apparent that the concave region is not disposed outside of the display region. Even if the concave region of Ozawa et al. is formed to be continuous among the adjacent pixels, the concave end is superimposed on the boundary portion of the display region and the non-display region. This is apparent from the description “three sides of the transmissive display region 32 is superimposed on three sides of the pixel region 3” in column 15, lines 33 through 35 and Fig. 4A of Ozawa et al. Accordingly, unlike the present invention, the concave end of Ozawa et al. is **not** disposed outside of the display region and is superimposed on the boundary portion of the display region and the non-display region. Thus, the orientation film remains in the end exists in the display region, thereby lowering display quality. Consequently, Ozawa et al. do not produce the notable advantage of preventing deterioration of display quality as in the present invention.

The above-argued functionally significant **structural differences** between the claimed display and the display disclosed by Ozawa et al. undermine the factual determination that Ozawa et al. disclose a display identically corresponding to that claimed. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1 through 4, 6, 7, 9 through 15, 18, 19, and 21 through 24 under 35 U.S.C. § 102 for lack of novelty as evidenced by Ozawa et al. is not factually viable and, hence, solicit withdrawal thereof.

Claims 8 and 20 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Ozawa et al. in view of Fujimori et al.

This rejection is traversed.

Specifically, claim 8 depends from independent claim 1 and claim 20 depends from independent claim 13. Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 13 under 35 U.S.C. § 102 for lack of novelty as evidenced by Ozawa et al. The secondary reference to Fujimori et al. does not cure the previously argued deficiencies of Ozawa et al. Accordingly, even if the applied references are combined as proposed by the Examiner, and Applicants do not agree that the requisite fact-based motivation has been established, the claimed invention would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Applicants, therefore, submit that the imposed rejection of claims 8 and 20 under 35 U.S.C. § 103 for obviousness predicated upon Ozawa et al. in view of Fujimori et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

New claims 25 through 34.

New claims 25 through 34 are clearly free of the applied prior art for reasons previously argued in traversing the imposed rejection of claim 1 under 35 U.S.C. § 102 for lack of novelty as evidenced by Ozawa et al. Indeed, new claim 25 corresponds to independent claim 1 but further limits the thickness of the convex insulating film.

Further, Applicants separately argue the patentability of claims 25 through 34, based upon the limitations expressed therein. In this respect, Applicants note that in conventional liquid crystal displays, since the convex insulating film 111 is formed to surround the transmissive region 190b, the orientation film stays in the concave region of a part of the pixels, the thickness of the orientation film at each pixel is varied, thereby disadvantageously adversely impacting the display quality, noting Fig. 27 and the related discussion thereof in the written description of the specification. This problem occurs when the thickness of the convex insulating film is about 2 μm to about 3 μm . Thus, the invention defined in independent claim 25 sets up and cures the problem of display quality deterioration when the thickness of the insulating film is about 2 μm to about 3 μm as disclosed.

On the other hand, Ozawa et al. neither disclose nor suggest the thickness of the convex insulating film being at least 2 μm . Clearly, Ozawa et al. do not even appear to recognize the problem addressed and solved by the claimed invention, which supports the nonobviousness of the claim subject matter as a whole. Accordingly, claims 25 through 34 are clearly free of the applied prior art.

Based upon the foregoing it should be apparent that the imposed rejections have been overcome, and that all active claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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